IN THE CLAIMS:

Please amend the claims, as follows:

Claim 1 (currently amended): A method of processing analog color signals, the method comprising:

analog preprocessing (2, 3) sensor output signals to obtain analog preprocessed signals that cause a reduced amount of digital quantization errors;

converting (5) the analog preprocessed signals into digital signals;

reconstructing (7) a first basic color signal (R), a second basic color signal (G), and a third basic color signal (B) from the digital signals; and

correcting (9) the basic color signals to obtain standardized signals, the correcting step comprising multiplication of a three color signal matrix containing the first, second and third basic color signals (R, G, B) by a correction matrix containing *RGB* matrix coefficients that depend on the analog preprocessing step (2, 3).

Claim 2 (original): A method according to claim 1, wherein the analog preprocessing step includes a white balance adjustment.

Claim 3 (original): A method according to claim 2, wherein the coefficients of the correction matrix depend on the analog preprocessing step in that correction matrix coefficients a_{xy} are replaced by coefficients b_{xy} with

PAGE 3/13 * RCVD AT 9/30/2005 6:57:58 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/28 * DNIS:2738300 * CSID:+18453597798 * DURATION (mm-ss):03-20

$b_{11} = a_{11}$
$b_{12} = a_{12} \times awbR$
$b_{13} = a_{13}$
$b_{21} = a_{21} / awbR$
$b_{22} = a_{22}$
$b_{23} = a_{23} / awbB$
$b_{31} = a_{31}$
$b_{32} = a_{32} \times awbB$
$b_{33} = a_{33}$

wherein $awbR$ equals a total contribution of Red divided by a total contribution of Green and $awbB$ equals a total contribution of Blue divided by a total contribution of Green wherein the total contributions of Red, Green and Blue are determined from the standardized signals.

Claim 4 (original): A method according to claim 1, wherein the sensor output signals comprise first, second and third analog color signals R_a, G_a and B_a, and wherein said analog preprocessing step includes respectively multiplying the color signals by

cR
cG
cB

where $cR = \sum R$ if $\sum R > 1$, else $cR = 1$;

where $cG = \sum G$ if $\sum G > 1$ else $cG = 1$;

where $cB = \sum B$ if $\sum B > 1$ else $cB = 1$, with

PAGE 4/13 * RCVD AT 9/30/2005 6:57:58 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/28 * DNIS:2738300 * CSID:+18453597798 * DURATION (mm-ss):03-20

$$\sum R = a_{11} + a_{12} + a_{13}$$
$$\sum G = a_{21} + a_{22} + a_{23}$$
$$\sum B = a_{31} + a_{32} + a_{33}$$

with a_{xy} being the coefficients the correction matrix would have without the analog preprocessing step, and wherein the coefficients a_{xy} of the correction matrix are replaced by coefficients b_{xy} with

$b_{xy} = a_{xy}/cR$ for $x = 1,2,3$ and $y = 1$;

$b_{xy} = a_{xy}/cG$ for $x = 1,2,3$ and $y = 2$;

$b_{xy} = a_{xy}/cB$ for $x = 1,2,3$ and $y = 3$.

Claim 5 (currently amended): A device for processing analog color signals, the device comprising:

means for analog preprocessing (2, 3) sensor output signals to obtain analog preprocessed signals that cause a reduced amount of digital quantization errors;

means for converting (5) the analog preprocessed signals into digital signals;

means for reconstructing (7) a first basic color signal (R), a second basic color signal (G), and a third basic color signal (B) from the digital signals; and

means for correcting (9) the basic color signals to obtain standardized signals, the correcting means comprising means for multiplying a three color signal matrix containing the first, second and third basic color signals (R, G, B) by a correction matrix containing <u>*RGB* matrix</u> coefficients that depend on the analog preprocessing means (2, 3).

PAGE 5/13 * RCVD AT 9/30/2005 6:57:58 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/28 * DNIS:2738300 * CSID:+18453597798 * DURATION (mm-ss):03-20

Claim 6 (original): A device according to claim 5, wherein the analog preprocessing means (3) includes means (3) for carrying out a white balance adjustment.

Claim 7 (original): A method according to claim 6, wherein the coefficients of the correction matrix depend on the analog preprocessing step in that correction matrix coefficients a_{xy} are replaced by coefficients b_{xy} with

$$\begin{aligned} b_{11} &= a_{11} \\ b_{12} &= a_{12} \times awbR \\ b_{13} &= a_{13} \\ b_{21} &= a_{21} / awbR \\ b_{22} &= a_{22} \\ b_{23} &= a_{23} / awbB \\ b_{31} &= a_{31} \\ b_{32} &= a_{32} \times awbB \\ b_{33} &= a_{33} \end{aligned} \qquad (6)$$

wherein $awbR$ equals a total contribution of Red divided by a total contribution of Green and $awbB$ equals a total contribution of Blue divided by a total contribution of Green wherein the total contributions of Red, Green and Blue are determined from the standardized signals.

Claim 8 (original): A device according to claim 5, wherein the sensor output signals comprise first, second and third analog color signals R_a, G_a and B_a, and

PAGE 6/13 * RCVD AT 9/30/2005 6:57:58 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/28 * DNIS:2738300 * CSID:+18453597798 * DURATION (mm-ss):03-20

wherein said analog preprocessing means (2) includes means (2) for respectively multiplying the color signals by

cR
cG
cB

where $cR = \sum R$ if $\sum R > 1$, else $cR = 1$;

where $cG = \sum G$ if $\sum G > 1$ else $cG = 1$;

where $cB = \sum B$ if $\sum B > 1$ else $cB = 1$, with

$\sum R = a_{11} + a_{12} + a_{13}$
$\sum G = a_{21} + a_{22} + a_{23}$
$\sum B = a_{31} + a_{32} + a_{33}$

with a_{xy} being the coefficients the correction matrix would have without the analog preprocessing step, and wherein the coefficients a_{xy} of the correction matrix are replaced by coefficients b_{xy} with

$b_{xy} = a_{xy}/cR$ for $x = 1,2,3$ and $y = 1$;

$b_{xy} = a_{xy}/cG$ for $x = 1,2,3$ and $y = 2$;

$b_{xy} = a_{xy}/cB$ for $x = 1,2,3$ and $y = 3$.

Claim 9 (original): A color camera comprising:

a sensor for generating sensor output signals; and

a device as claimed in claim 5.

PAGE 7/13 * RCVD AT 9/30/2005 6:57:58 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/28 * DNIS:2738300 * CSID:+18453597798 * DURATION (mm-ss):03-20